



PATENT SPECIFICATION

648.714

Date of Application and filing Complete Specification: March 31, 1948.

No. 9114/48.

Application made in United States of America on April 15, 1947.

Complete Specification Published: January 10, 1951.

Index at acceptance:—Class 108(i), A4.

COMPLETE SPECIFICATION

Collapsible Golf-Bag Cart

I, THOMAS ALBERT HUTSELL, of 303, Park Avenue, Renton, Washington, United States of America, a Citizen of the United States of America, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

My present invention relates to golfing accessories and, more particularly, to a collapsible golf-bag cart.

The change in economic conditions has reduced the usual supply of caddies to a very low minimum and this condition, in turn, has awakened interest in a cart which will enable a player to conveniently wheel about the golf course his own heavy bag of clubs. Many attempts have been made to provide a wheeled arrangement for the transportation of a golf bag, and many have been produced which are particularly easy to use and have awakened the general public to the desirability of such a transporting device. However, in the various bag carts that have been observed none seem to fully take into account the need of such a device. There is need for more than just a device that will conveniently permit the transportation of a golf bag. Any golf-bag cart is used but a relatively small fraction of the time and during the rest of the time it must be either transported by its owner in his car or it must be stored in a locker at his favourite golf club.

A careful survey of the known golf carts disclosed that, in order to achieve the folding in of the necessary wheels and the folding of the handle and the like, most of the carts produced are bulky, which very materially increases the overall dimensions of the golf bag to such an extent that its transportation in a car is difficult and it will not go into the standard lockers that have for years been provided at golf clubs. It is to overcome these deficiencies as noted that I have produced my foldable golf bag cart.

My present cart is so arranged that it can be folded in such a manner that the wheels themselves are substantially co-axial with the bag, and add but very little to the length of the same. I have further provided that the

cart itself is made largely of shade metal plate, preferably aluminium or its various alloys, so that very little additional size is added to the cross section of a golf bag. Therefore, it can be placed in the usual golf-bag locker or can be stowed in an automobile with practically the same ease as a golf bag without a cart attachment.

The principal object of my invention, therefore, is to provide a golf bag cart which is folded in such a manner that it adds little to the length or girth of a standard golf bag.

A further object of my invention is the provision of a golf bag cart which is fabricated of flat sheet metal plate so formed as to partially encircle the bag and thus tend to fit into the general contour of the same.

A further object of my present invention is to provide a golf bag cart in which the wheels are arranged so that they lie substantially coaxial with the bag when folded and take up as additional space substantially only the thickness of the rubber tires on the wheels.

A further object of my invention is to use structural shapes as distinct from tubing, to the end that the various essential parts can be made cheaply of easily obtainable materials and because of their shape can be made of relatively light sections.

A further object of my present invention is to provide a golf bag cart in which the various elements are locked in the transporting position and are easily unlocked and put into the position of use, at which time they automatically become locked again in their position of use.

A further object of my present invention is to provide a golf bag cart which is easily opened for use or closed for transportation, and in either case, provides a well balanced carrying package.

In the accompanying drawings:

Fig. 1 is a side elevational view of a golf bag cart, the same showing a golf bag and set of clubs in dashed lines to illustrate the relationship between the cart and the bag.

Fig. 2 is a vertical elevational view, showing my cart in its collapsed position but with the golf bag removed therefrom.

[Price 2/-]

BEST AVAILABLE COPY

Fig. 3 is a top plan view of my golf bag when the same is folded, and with the bag securing straps removed to clarify the view.

Fig. 4 is a perspective view showing my golf bag cart in position for use excepting that the golf bag itself has not been put in place.

Fig. 5 is an enlarged vertical sectional view such as would be observed by taking a vertical sectional view through a lower portion of Fig. 2.

Fig. 6 is an enlarged detail view showing the lower portion of the bracket bar and the means employed for locking the wheel outriggers in position.

Fig. 7 is a view on the same general scale as Fig. 6 but showing a face view of the bracket bar and the outrigger locking means.

Fig. 8 is a cross sectional view, taken along the lines 8—8 of Fig. 6.

Fig. 9 is a cross sectional view taken along line 9—9 of Fig. 7.

Referring more particularly to the disclosure in the drawings, the numeral 10 designates the main frame of my cart. This I prefer to form with a broad principal portion 11 and angularly disposed side members 12 and 14. This frame, which is the main member of my cart, has secured to it at its lower end the bag supporting bracket 15. The bracket has a downwardly extending lip portion 16 which serves as a rest for the bag when in use, as will probably best be observed from a study of Fig. 1. At its upper end, frame 10 has slidably secured to it the top bracket or securing member 18. This member is slotted as at 19, and may be locked in vertical adjusted position by a plurality of screws 20. At its upper end, member 18 is provided with a strap and strap securing means 21 and 22, respectively, so that it can engage the upper margin of a golf bag after the showing of Fig. 1.

Co-acting with strap 21 are lower straps 23 which are secured at one end to the main frame and are slidably positioned through slotted brackets secured to base bracket 15. Thus it can be seen that when the upper and lower straps are fully secured around the golf bag, it is held firmly in position, so that the bag can be handled by grasping the cart or, conversely, the cart, in its fixedly folded position, is easily handled by grasping the bag.

Pivotaly secured to the main portion of frame 10, as at 24, is the handle 26. This handle is secured in fixed operating relationship with the main frame by a handle strap 27, which is pivoted to the handle and engages, by means of a downturned end, the main frame, through the means of a spaced-apart bracket 28. The handle itself is bifurcated at its outer end and the two like mem-

bers are spread so as to accommodate a covered handle 30. On the under side of handle 26 are two spaced-apart detents 31, which serve a locking purpose that will be more apparent later.

Pivotaly secured to the main portion of frame 10 at 34 is the collapsible bracket bar 36. This bar forms a housing for the wheel outriggers 38 and 39 when the cart is in its collapsed position, and serves as a means for transferring the load from the bag to the wheels and their associated outrigger arms when the cart is in use.

Pivotaly secured to the outer end of bar 36, as at 40, is the bracket strut 42. In the position of the cart, when in use a downturned end of the bracket strut, as 44, is engaged in the outstanding bracket 45 secured to the main frame. This provides a triangular arrangement involving the main frame, the bracket bar and the bracket strut, so that great rigidity is obtained.

At their outer ends the outrigger arms 38 and 39 are provided with downturned portions 47 and 48, which in turn carry the wheel axles 50 and 51. To these wheel axles are secured the load carrying wheels 53 and 54.

Referring more particularly to Fig. 5, it will be observed that each of the wheels is provided with a centrally disposed journal member as 56 or 57 and, in turn, each of these have at one side of the journal a stud, as 59 and 60, which serves, by means of a swedged-on collar 61, to secure the journals fixedly to the outrigger legs. The outer ends of journals 56 and 57 are flanged over the wheel-bearing members 62, so as to hold the wheels fixedly in position, but permitting their easy revolution upon the journals. Each of the journals is further provided with an axially disposed recess, or bore, 64, which, as will be observed in Fig. 5, is employed to insure accurate alignment of the wheels when the cart is in its folded position. It is desirable that both of these wheel assemblies be similar in construction, so that either one might be placed uppermost in the folded position.

The manner in which the outrigger arms are folded and locked in their folded positions will probably be best understood from a study of Figs. 6, 7, 8, and 9. Supported from bracket bar 36, in spaced apart relationship, are the two outrigger side support and guide members 66 and 68, which are of considerable lateral extent and are spaced apart sufficiently so as to slidably receive the outrigger arms 38 and 39. Each of these outrigger arms is provided with a detent as 73 and 74, which extend outwardly from each surface of the outriggers so as to engage guide bars 66 and 68 for the full thick-

ness of the members. This construction is probably best illustrated in Figs. 8 and 9. In Fig. 7 it will be noted that the outriggers have one of their corners rounded, as at 75 and 76, so that they may be individually revolved about their respective detents 73 or 74 without interfering with each other. This is essential, in order to have a compact arrangement with the two outriggers in the same plane without interference which would otherwise occur.

It is to be noted in Fig. 7 that guide plates 66 and 68 have vertical slots for the engagement of detents 73 and 74. These are illustrated at 78 and 79 and are preferably tapered substantially as illustrated, so that the detents are free to pass upwardly out of the slot and can easily center themselves when they are again brought down to re-engage the slots during the folding operation and while in the folded position.

Disposed upon the lateral extension of side plates 66 and 68 are two companion U-shaped locking members 81 and 82. These members are held in position by screws 83, but are pivotally held so that they can normally assume the position shown in Fig. 6, in which the actual locking cams as 85 and 86 are underneath the outrigger arms and lock them in the outwardly extended position. They are held in this position normally by springs 88. It will be apparent, however, that if member 81 is moved to the left, as viewed in Fig. 6, to the dotted line position shown, the locking cam members 85 and 86 will be withdrawn from engagement with the outriggers to permit the same to be folded into the carrying position. In the extended position, the outrigger arms 38 and 39 are blocked with filler blocks 90, one of which is disposed on each side of frame 10 immediately under the U-shaped cam members 81 and 82.

METHOD OF OPERATION

Assuming the bag cart to be in its folded position, as shown for instance in Fig. 2, the first operation required to put it into service is to grasp handle 30 and swing it upwardly to the general position shown in Fig. 1 and to then secure it in that position by means of the handle strut 27. This movement of the handle has withdrawn detents 31 which normally pass through holes 93 in bar 36 and engage into openings in the outrigger arms, as shown in Fig 5 at 94. This releases the outriggers so that the outriggers and the wheels that they support can be pulled outwardly until detents 73 and 74 again engage slots 78 and 79 and reach the bottom thereof as shown in Fig. 7. At this time, the outriggers can be swung upon the detent pivots 73 and 74 to their extended outward positions and during this operation they will

cam out of their way the locking cams 75 and 76 due to the curved faces of these cams, which is illustrated in Fig. 8. Springs 88 assure the positioning of these cams as soon as the outrigger arms are in their fully extended outward position. At this time the collapsible bracket bar 36 can be swung about pivot 34 until it assumes its final position substantially as shown in Fig. 1 and Fig. 4, at which time the bracket strut 42 is snapped into bracket 45 and the device is ready for use.

To close the device for transporting it after use, a reversal of this operation is followed, except that at this time it is necessary to manually compress springs 88 in order that the outriggers may be pivoted on detents 73 and 74 and again be brought to a position with their axis aligned with bracket 36. It is then only necessary to swing the wheels into position so that the stud 60 aligns the two wheels and then in turn engage in the bracket opening in bracket 15 so as to assure coaxial alignment of the wheels. After the bracket strut 42 and the bracket bar 36 are collapsed, handle 26 may then be collapsed and detents 31 will again lock the equipment in its travelling position.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. Cart for a golf-bag, in which the bag is supported on a frame carried by wheels, including outriggers extending transversely of the frame and supporting the wheels, and a pivotal connection between the inner end of each outrigger and the frame, whereby the wheels may be brought into juxtaposition with each other, with the wheels disposed at one end of the position occupied by the bag on said frame.

2. A cart for a golf-bag, as set forth in Claim 1, including a collapsible bracket carried by the frame, and means for pivotally coupling the outriggers for the wheels to said bracket, whereby the wheels may be brought into juxtaposition with each other with the wheel axes parallel to said frame and the outriggers also parallel to the frame.

3. A cart for a golf-bag, as set forth in Claim 2, including latch means for retaining the outriggers from pivotal movement relatively to the frame or bracket.

4. A cart for a golf-bag, as set forth in Claim 2, including as parts of the bracket a bar pivotally secured to the frame, and a strut pivotally secured to the bar, the outriggers for the wheels being supported by said bracket in either extended position of use or in folded position.

5. A cart for a golf-bag, as set forth in Claim 1, including housing means for the

outriggers protecting them when in folded position and adapted to maintain the wheels with their axis of rotation substantially alined with the longitudinal axis of the frame.

5 6. A cart for a golf-bag, as set forth in Claim 3, including on the outriggers, means for guiding and positioning them at their inner ends relatively to the frame and
10 bracket, the bracket having guide bars fixedly secured thereto, and the guide bars being adapted to coact with the positioning means for the outriggers to guide and position the outriggers.

15 7. A cart for a golf-bag, as set forth in Claim 6, including spring urged locking members pivotally supported by the guide bars and adapted to lock the outriggers for the wheels in operative position.

20 8. A cart for a golf-bag, as set forth in Claim 1, including a bar hingedly coupled to the frame and located alongside the frame, and a pair of brackets having their arms arranged in juxtaposition with each
30 other and with said bar, the bracket arms

being slidably associated with the bar and the leg portions of the brackets being transversely disposed relatively to the frame, the leg portions having the wheels pivotally mounted thereon.

35 9. A cart for a golf-bag, as set forth in Claim 8, including a handle hingedly secured to the frame and adapted to form a cover for the bracket bar and the strut when they are in folded position.

40 10. A cart for a golf-bag, as set forth in Claim 9, in which the frame is of U-shaped cross-section, the handle also being of channel section so as to form the securing cover for the bracket elements when they are in folded condition.

45 11. A cart for a golf-bag, substantially as described and shown, and for the purpose set forth.

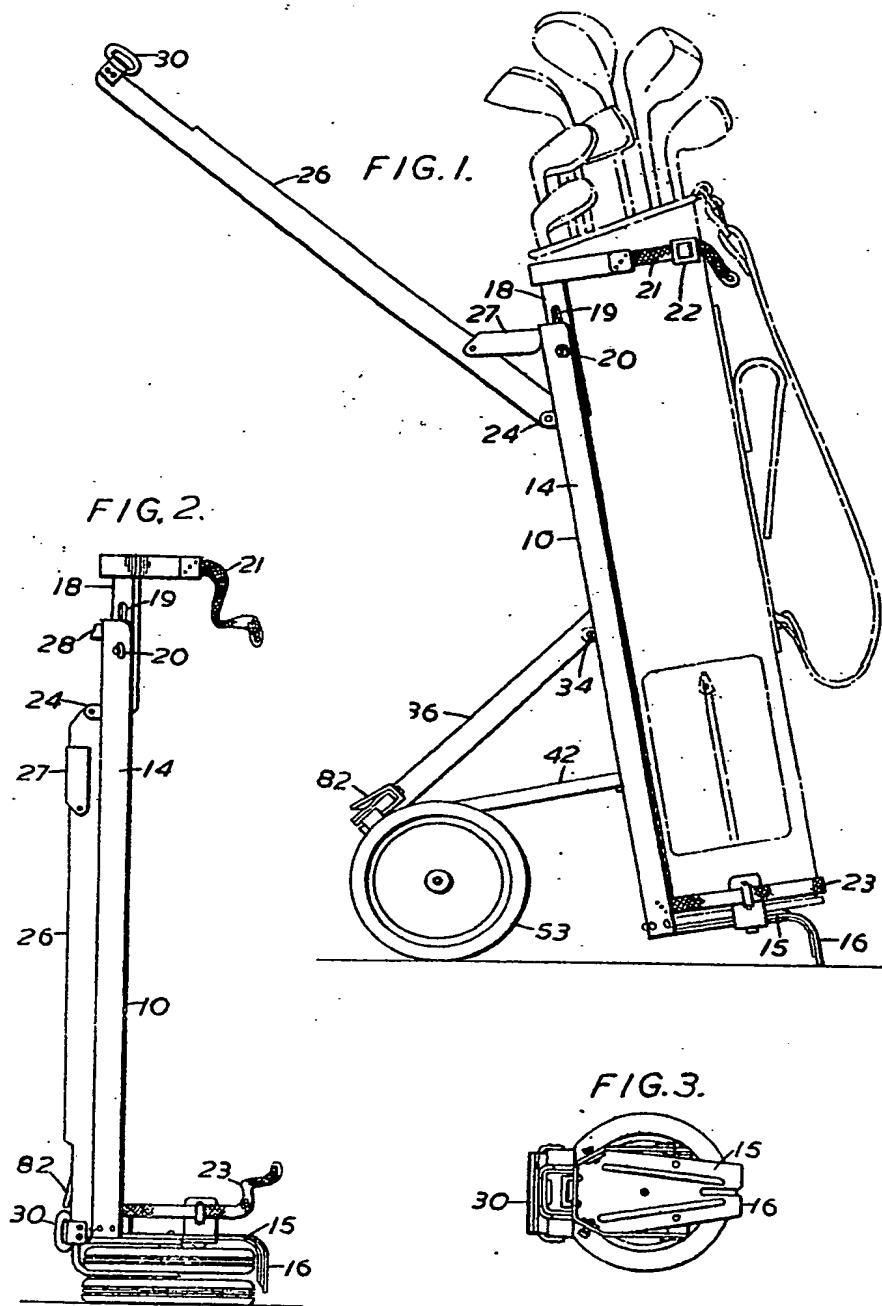
Dated this 31st day of March, 1948.

For the Applicant,
FRANK B. DEHN & CO.,
Chartered Patent Agents,

Kingsway House, 103, Kingsway, London,
W.C.2.

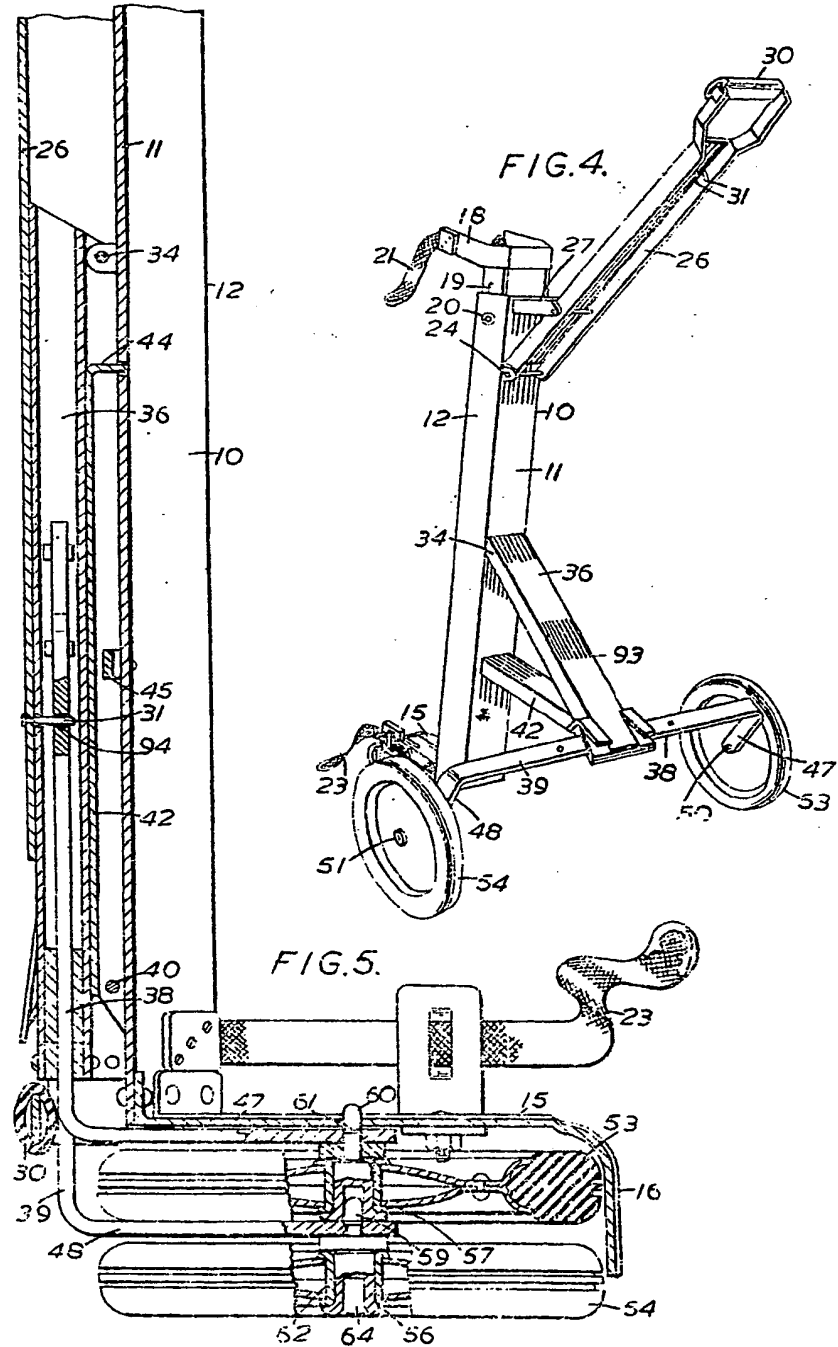
Leamington Spa: Printed for His Majesty's Stationery Office, by the Courier Press.—1951.
Published at The Patent Office, 25, Southampton Buildings, London, W.C.2, from which
copies, price 2s. per copy; by post 2s. 1d. may be obtained.

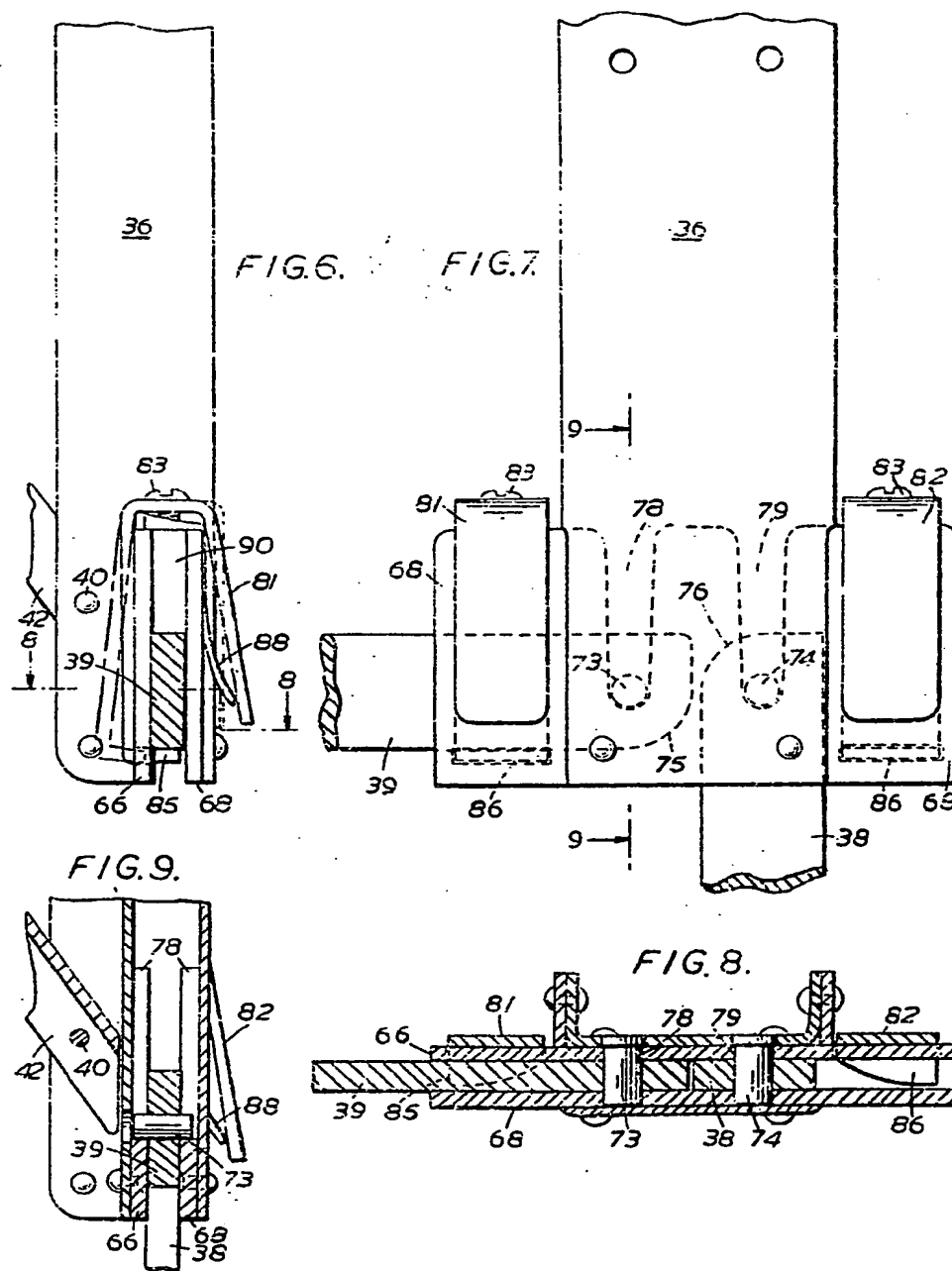
[This Drawing is a reproduction of the Original on a reduced scale.]



H.M.S.O. (Ty. P.)

[This Drawing is a reproduction of the Original on a reduced scale.]



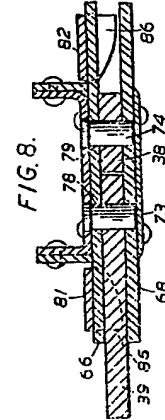
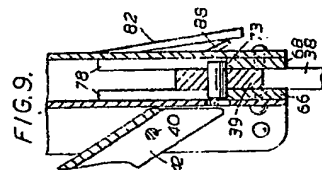
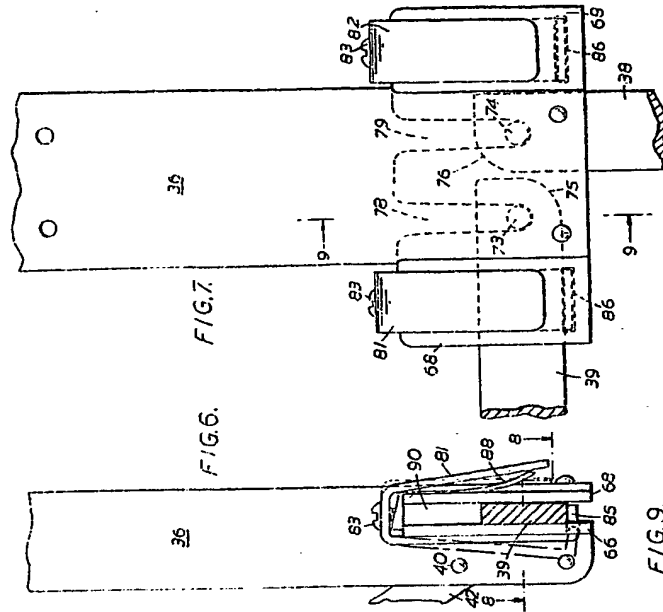
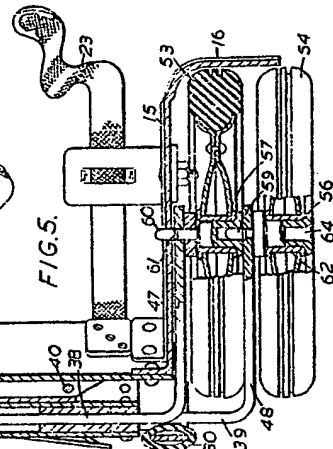
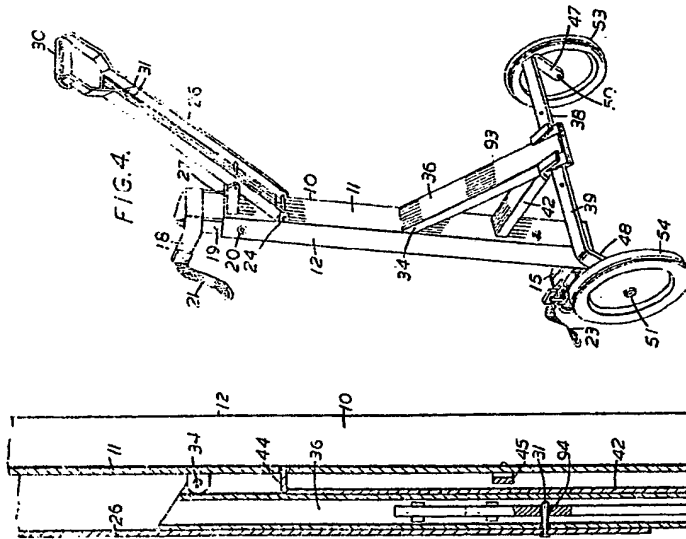


648,714 COMPLETE SPECIFICATION

SHEET 2

3 SHEETS
FIG. 7.3

[This Drawing is a reproduction of the Original on a reduced scale]



H.M.S.O. (4/2)

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☒ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

THIS PAGE BLANK (USPTO)